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**PRELIMINARY ASSESSMENT
FOR
BATTEY GENERAL HOSPITAL
ROME, FLOYD COUNTY GEORGIA**

#1978

[Signature]
NFRP
11/9/92

**PREPARED FOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV**

**PREPARED BY
NORMAN R. WOODBURN
GEORGIA ENVIRONMENTAL PROTECTION
DIVISION**

SEPTEMBER 30, 1992

**Preliminary Assessment
Battey General Hospital
Rome, Floyd County, Georgia**

1. Introduction

Under authority of The Comprehensive Environmental Response Compensation , and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Georgia Environmental Protection Division (EPD), Hazardous Waste Management Branch, Region 4 conducted a Preliminary Assessment (PA) at the Battey General Hospital (now the Northwest Regional Hospital) site in Floyd County, Georgia. The purpose of this investigation was to collect information concerning conditions at the Battey General Hospital sufficient to assess the threat posed to human health and the environment and to determine the need for additional CERCLA/SARA or other appropriate action. The scope of the investigation included a review of available file information, telephone communication with key individuals and a target survey.

2. Site Description, Operational History, and Waste Characteristics

2.1 Location

ZY-Battey General Hospital (now operating as Northwest Georgia Regional Hospital) was located northwest of the city of Rome, Floyd County, Georgia. The geographic coordinates are 34°16'44" North latitude and 85°12'30" West longitude (Ref. 1). The site location is shown in Figure 1 (Ref. 1).

2.2 Site Description and Operational History

The acquisition of the facility was authorized due to military necessity under general order No. 23, dated May 15, 1943. The site comprised approximately 160 acres of land consisting of five tracts acquired in fee by declaration of taking for a specified amount of money (\$13,499). (Ref. 12). Battey General Hospital was a 1500 bed military hospital under the command of the Army Service Forces, Fourth Service Command. The facility included administrative and operational buildings, recreational facilities, military housing, and had the capacity to accommodate 2,000 patients (Ref. 12).

In January 1946, Battey General Hospital was declared surplus by the War Department. Accountability for the site was assumed by the Federal Works Agency in March 1946. In January 1947, the entire facility with the exception of the chapel was conveyed to the State of Georgia by quitclaim deed. (Ref. 12) The facility now operating as Northwest Georgia Regional Medical Center, employing 800 full and part time workers (Ref. 6). Land use surrounding the site consists of residential, commercial, industrial and mining (Ref. 6).



FIGURE 1
SITE LOCATION MAP
BATTY GENERAL HOSPITAL
ROME, GA, FLOYD COUNTY

2.3 Waste Characteristics

According to the U.S. Army Inventory Project Report (Ref. 12) of April 16, 1991, for site no. I04GA41800, a large number (one boxcar) of full paint cans was buried during the operation of the military hospital between 1943 and 1946. The exact burial location is unknown and is thought to have taken place around the vicinity of Building 901 (steam plant) and the handball court (Ref. 8). There is no recorded documentation to verify burial of the boxcar and the paint on site (Ref. 5, 6 and 8). This information was presented by a hospital employee who stated that he had buried the paint cans during the period of Department of Defense ownership (1943-1946) (Ref. 12). Fred F. Moser (Ref. 5) conducted a site assessment of the facility on September 13, 1990. During the site assessment, Fred Moser met with Institutional and Maintenance Engineers who were unable to provide factual information about the disposition of the paint. A telephone conversation with Fred Moser on 9/27/92 and 9/28/92 confirmed that he found no records to substantiate the burial of paint on site. A Preliminary Assessment of the Battey General Hospital was conducted by the Department of the Army, the following information is presented:

- a. It was determined that the site was formerly used as a 1,500 bed military hospital by the Army (Ref. 12).
- b. It was determined that there is hazardous waste at the site eligible for cleanup under the Defense Environmental Restoration Program (DERP) for Formerly Used Defense Sites (FUDS) (Ref. 12). The determination that hazardous wastes exists on site was not supported by analytical data and was made based on a site visit and interviews with certain individuals (Ref. 5). There is no evidence of releases or suspected release of hazardous substances on site that could be associated with the burial of paint during the period of 1943-1946.
- c. It was recommended that the proposed clean up of the site under the DERP-FUDS program be approved.

3. Ground Water Pathway

3.1 Hydrogeologic Setting

The Battey General Hospital (now Northwest Georgia Regional Hospital) is located in the Valley and Ridge Physiographic Province of the Appalachian Valley Division in northwest Georgia (Ref. 2 and 13). The area has a mild climate with an annual rainfall of 52 - 56 inches per year (Ref. 3). The elevation of the site is 650 feet (Ref. 1). The site located in northwest Georgia is underlain by folded and faulted sedimentary formations of the Valley and Ridge Province (Ref. 2). Steep slopes on highlands divert runoff to recharge areas in lowlands (Ref. 2). Many lowlands in Valley and Ridge

Province are underlain by limestones and dolostones. The most significant recharge areas are those outcrop areas of carbonate rock units where low slope conditions prevail. Some of these recharge areas are characterized by Karst topography (caves and sinkholes) (Ref. 2). Extensive Karst aquifer systems have developed in places in the carbonate rocks. Ground water flow in these aquifers is at least partly controlled by solutions channels. Thick soils and cherty residuum overlie the carbonates and allow slow infiltration of water. The aquifers often discharge at springs in the area, several of which are used for public water supplies. Wells drilled into the aquifers can yield large amounts of water.

3.2 Ground Water Targets

There are no groundwater targets. The city of Rome receives its water supply from surface water intakes. There are no well within 4 miles of the site. The closest well is approximately 5 miles from the site (Ref. 9 and 10).

3.3 Ground Water Conclusions

There is no indication of a release of contaminants to groundwater.

4. Surface Water Pathway

4.1 Hydrogeologic Setting and Surface Water Targets

The city of Rome obtains its water from two surface water intakes, one intake is located on the Oostanuala River (Primary intake) which has a flow rate of 3,530 cubic feet per second (Ref. 3 and 14). the other intakes located on the Etowah River, (Backup intake) which joins the Oostanuala River to form the Coosa River. The Etowah River has a flow rate of 258 cubic feet per second (Ref. 3, 14). The city of Rome serves a population of approximately 30,000 (Refs. 9, 10 and 15). Areas surrounding the city of Rome obtain their water from the Floyd County Water department. Floyd County purchases most its water from Rome, but also obtains water from a spring near Cave Springs 15 miles southwest of Rome. The County serves approximately 12,000 connections (Ref. 8 and 13).

There is no commercial fishing or wetlands located along the 15 mile surface pathway (Ref. 7). Recreational fishing takes place in the Etowah, Oostanaula and Coosa Rivers. The predominate types of fish caught are sunfish, catfish, large mouth bass and striped bass (Ref. 7 and 14).

4.2 Surface Water Conclusions

There is no indication of a release of contaminants to surface water, therefore the surface water pathway is of no concern at this site. No sensitive environments were identified

as targets along the 15 miles downstream distance.

5. Soil Exposure and Air Pathways

5.1 Soil and Air Targets

There are approximately 800 full time and part time workers on site (Ref. 6). The distance from the site to the nearest residence is approximately 300 feet (Ref. 1 and 6). There are approximately 3,918 residents located within 1 mile of the site and 11,993 residents located 4 miles from the site. (Ref. 4). The nearest school is approximately 1 mile northeast of the site (Ref. 1). There are no Federally designated critical habitats in Floyd County (Ref. 7, 13 and 16).

5.2 Soil Exposure and Air Pathway Conclusions

The soil exposure and the air pathway exposure is of no concern. There is no documentation of contaminated surface soils or spills occurring at the site. There is no air emission sources on the site. There is no dust from contaminated surface soils that could pose a threat to surrounding environments or populations.

6. Summary and Conclusions

The primary questions that exist at the site are, was a boxcar filled with full paint cans buried at the site? If so, how much paint was buried and where was the burial site? How likely is the possibility that the paint can migrate into the soil and groundwater?

Batley General Hospital, Floyd County, Rome, Georgia was operated by the U. S. Army from 1943-1946. During that time it is alleged that paint was buried at the site. No proof exists that this actually occurred. It is also rumored that the paint was buried in the vicinity of the stream plant (BLDG 901) and the handball court. Again, there is no evidence to confirm this rumor. A U.S. Army Inventory Project Report (INPR) conducted in April 1991, determined that there is hazardous waste at the site eligible for cleanup under the DERP-FUDS program. The report is not supported by data that validates the Army's assertion that hazardous waste exists at the site.

The report of findings from the Inventory Project Report (INPR) is based solely on the site visit and interviews with hospital personnel. The groundwater, surface water, soil and air pathways are of no concern at the site, based on no documentation and no indication of a release. Based on the results of this investigation and the absence of any information that would prove or disprove burial of the paint and any release that might be present, it is recommended that no further remedial action be planned.

APPENDIX A

OMB Approval Number: 2050-0095
Approved for Use Through: 1/92

PA Scoresheets

Site Name: <u>2Y-BATTEY GENERAL HOSP.</u>	Investigator: <u>NORMAN R. WOODBURN</u>
CERCLIS ID No.: <u>GAD 984 309096</u>	Agency/Organization: <u>GA. EPD</u>
Street Address: <u>1305 REDHAWK CIRCLE</u>	Street Address: <u>205 BUTLER ST. SUITE 1157</u> <u>FLOYD TOWER EAST</u>
City/State/Zip: <u>ROME, GA. 30165</u>	City/State/Zip: <u>ATLANTA, GA 30334</u>
	Date: <u>SEPT. 30, 1992</u>

SOURCE EVALUATION

Source No.:	Source Name: BOXCAR FILLED WITH PAINT	Source Waste Quantity (WQ) Calculations:
Source Description: A BOXCAR FILLED WITH PAINT CANS (FULL) WAS ALLEGEDLY BURIED ON THIS SITE. THIS INCIDENT IS SAID TO HAVE OCCURRED BETWEEN 1943-1946. THERE IS NO DOCUMENTATION TO SUPPORT THIS ALLEGATION		TIER: VOLUME BOXCAR DIMENSIONS $40 \times 10 \times 8 = 3200 \text{ CUBIC FT.}$ DUE TO CYLINDRICAL SHAPE OF PAINT CANS - ESTIMATE THAT THE BOXCAR WAS ONLY 70% FULL WHEN BURIED $3200 \times .7 = 2,240 \text{ CU. FT. OF PAINT}$ $1 \text{ CU. FT.} = \text{OR } 7.4805 \text{ GALLONS OF PAINT}$ $2240 \times 7.4805 = 16,756 \text{ GALLONS OF PAINT}$
Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:
Source Description:		
Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:
Source Description:		

Site WC:

18

PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

PA Table 1a: WC Scores for Single Source Sites and Formulas for Multiple Source Sites

TIER	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES
		WC = 18	WC = 32	WC = 100	Formula for Assigning Source WQ Values
Quantity	N/A	≤ 100 lb	> 100 to 10,000 lb	$> 10,000$ lb	$lb + 1$
	N/A	$\leq 500,000$ lb	$> 500,000$ to 50 million lb	> 50 million lb	$lb + 5,000$
VOLUME	Landfill	≤ 6.75 million ft^3 $\leq 250,000$ yd^3	> 6.75 million to 675 million ft^3 $> 250,000$ to 25 million yd^3	> 675 million ft^3 > 25 million yd^3	$ft^3 + 67,500$ $yd^3 + 2,500$
	Surface impoundment	$\leq 6,750$ ft^3 ≤ 250 yd^3	$> 6,750$ to 675,000 ft^3 > 250 to 25,000 yd^3	$> 675,000$ ft^3 $> 25,000$ yd^3	$ft^3 + 67.5$ $yd^3 + 2.5$
	Drums	$\leq 1,000$ drums	$> 1,000$ to 100,000 drums	$> 100,000$ drums	$drums + 10$
	Tanks and non-drum containers	$\leq 50,000$ gallons	$> 50,000$ to 5 million gallons	> 5 million gallons	$gallons + 500$
	Contaminated soil	≤ 6.75 million ft^3 $\leq 250,000$ yd^3	> 6.75 million to 675 million ft^3 $> 250,000$ to 25 million yd^3	> 675 million ft^3 > 25 million yd^3	$ft^3 + 67,500$ $yd^3 + 2,500$
	Pile	$\leq 6,750$ ft^3 ≤ 250 yd^3	$> 6,750$ to 675,000 ft^3 > 250 to 25,000 yd^3	$> 675,000$ ft^3 $> 25,000$ yd^3	$ft^3 + 67.5$ $yd^3 + 2.5$
	Other	$\leq 6,750$ ft^3 ≤ 250 yd^3	$> 6,750$ to 675,000 ft^3 > 250 to 25,000 yd^3	$> 675,000$ ft^3 $> 25,000$ yd^3	$ft^3 + 67.5$ $yd^3 + 2.5$
AREA	Landfill	$\leq 340,000$ ft^2 ≤ 7.8 acres	$> 340,000$ to 34 million ft^2 > 7.8 to 780 acres	> 34 million ft^2 > 780 acres	$ft^2 + 3,400$ $acres + 0.078$
	Surface impoundment	$\leq 1,300$ ft^2 ≤ 0.029 acres	$> 1,300$ to 130,000 ft^2 > 0.029 to 2.9 acres	$> 130,000$ ft^2 > 2.9 acres	$ft^2 + 13$ $acres + 0.00029$
	Contaminated soil	≤ 3.4 million ft^2 ≤ 78 acres	> 3.4 million to 340 million ft^2 > 78 to 7,800 acres	> 340 million ft^2 $> 7,800$ acres	$ft^2 + 34,000$ $acres + 0.78$
	Pile*	$\leq 1,300$ ft^2 ≤ 0.029 acres	$> 1,300$ to 130,000 ft^2 > 0.029 to 2.9 acres	$> 130,000$ ft^2 > 2.9 acres	$ft^2 + 13$ $acres + 0.00029$
	Land treatment	$\leq 27,000$ ft^2 ≤ 0.62 acres	$> 27,000$ to 2.7 million ft^2 > 0.62 to 62 acres	> 2.7 million ft^2 > 62 acres	$ft^2 + 270$ $acres + 0.0062$

1 ton = 2,000 lb = 1 yd^3 = 4 drums = 200 gallons

* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WQ Total	WC Score
> 0 to 100	18
> 100 to 10,000	32
$> 10,000$	100

**GROUND WATER PATHWAY
GROUND WATER USE DESCRIPTION****Describe Ground Water Use Within 4-miles of the Site:****(Describe stratigraphy, information on aquifers, municipal and/or private wells)**

WATER SUPPLIED BY SURFACE WATER
(REF. 10)

N/A

Calculations for Drinking Water Populations Served by Ground Water:

N/A

GROUND WATER PATHWAY CRITERIA LIST	
SUSPECTED RELEASE	PRIMARY TARGETS
<p>Y N U e o n s k</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Are sources poorly contained?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is waste quantity particularly large?</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is precipitation heavy?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is the infiltration rate high?</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is the site located in an area of karst terrain?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is the subsurface highly permeable or conductive?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is drinking water drawn from a shallow aquifer?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Are suspected contaminants highly mobile in ground water?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Does analytical or circumstantial evidence suggest ground water contamination?</p> <p><input type="checkbox"/> <input type="checkbox"/> Other criteria? _____</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> SUSPECTED RELEASE?</p>	<p>Y N U e o n s k</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is any drinking water well nearby?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Has any nearby drinking water well been closed?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Has any nearby drinking water user reported foul-tasting or foul-smelling water?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Does any nearby well have a large drawdown or high production rate?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is any drinking water well located between the site and other wells that are suspected to be exposed to a hazardous substance?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Does analytical or circumstantial evidence suggest contamination at a drinking water well?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Does any drinking water well warrant sampling?</p> <p><input type="checkbox"/> <input type="checkbox"/> Other criteria? _____</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> PRIMARY TARGET(S) IDENTIFIED?</p>
<p>Summarize the rationale for Suspected Release (attach an additional page if necessary):</p> <p>NO SUSPECTED RELEASE</p>	<p>Summarize the rationale for Primary Targets (attach an additional page if necessary):</p> <p>PRIMARY TARGETS NOT IDENTIFIED</p>

Date:

GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>
Is the site located in karst terrain?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Depth to aquifer:	<u>26</u> ft
Distance to the nearest drinking water well:	<u>400</u> ft

LIKELIHOOD OF RELEASE

1. **SUSPECTED RELEASE:** If you suspect a release to ground water (see page 7), assign a score of 550. Use only column A for this pathway.
2. **NO SUSPECTED RELEASE:** If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.

A	B
Suspected Release	No Suspected Release
550	500
	500

LR =

TARGETS

3. **PRIMARY TARGET POPULATION:** Determine the number of people served by drinking water wells that you suspect have been exposed to a hazardous substance from the site (see Ground Water Pathway Criteria List, page 7).
_____ people $\times 10 =$ _____
4. **SECONDARY TARGET POPULATION:** Determine the number of people served by drinking water wells that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 2.
Are any wells part of a blended system? Yes ☐ No ☒
If yes, attach a page to show apportionment calculations.
5. **NEAREST WELL:** If you have identified a primary target population for ground water, assign a score of 50; otherwise, assign the Nearest Well score from PA Table 2. If no drinking water wells exist within 4 miles, assign a score of zero.
6. **WELLHEAD PROTECTION AREA (WHPA):** If any source lies within or above a WHPA, or if you have identified any primary target well within a WHPA, assign a score of 20; assign 5 if neither condition holds but a WHPA is present within 4 miles; otherwise assign zero.
7. **RESOURCES**

	0
	0
	0
	5
	5

T =

WASTE CHARACTERISTICS

8. A. If you have identified any primary target for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- B. If you have NOT identified any primary target for ground water, assign the waste characteristics score calculated on page 4.

	18
	18

WC =

GROUND WATER PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

(subject to a maximum of 100)

1

PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 20	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	
0 to 1/4 mile	_____	20	1	2	5	16	52	163	521	1,633	5,214	16,325	_____
> 1/4 to 1/2 mile	_____	18	1	1	3	10	32	101	323	1,012	3,233	10,121	_____
> 1/2 to 1 mile	_____	9	1	1	2	5	17	52	167	522	1,668	5,224	_____
> 1 to 2 miles	_____	5	1	1	1	3	9	29	94	294	939	2,938	_____
> 2 to 3 miles	_____	3	1	1	1	2	7	21	68	212	678	2,122	_____
> 3 to 4 miles	_____	2	1	1	1	1	4	13	42	131	417	1,308	_____
Nearest Well =		_____	Score =										_____

PA Table 2b: Karst Aquifers

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 20	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	
0 to 1/4 mile	_____	20	1	2	5	16	52	163	521	1,633	5,214	16,325	_____
> 1/4 to 1/2 mile	_____	20	1	1	3	10	32	101	323	1,012	3,233	10,121	_____
> 1/2 to 1 mile	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 1 to 2 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 2 to 3 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 3 to 4 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
Nearest Well =		_____	Score =										_____

SURFACE WATER PATHWAY CRITERIA LIST	
SUSPECTED RELEASE	PRIMARY TARGETS
<p>Y N U e o n s / k</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is surface water nearby?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is waste quantity particularly large?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is the drainage area large?</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is rainfall heavy?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is the infiltration rate low?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Are sources poorly contained or prone to runoff or flooding?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is a runoff route well defined (e.g., ditch or channel leading to surface water)?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is vegetation stressed along the probable runoff route?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Are sediments or water unnaturally discolored?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is wildlife unnaturally absent?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Has deposition of waste into surface water been observed?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is ground water discharge to surface water likely?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Does analytical or circumstantial evidence suggest surface water contamination?</p> <p><input type="checkbox"/> <input type="checkbox"/> Other criteria? _____</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> SUSPECTED RELEASE?</p>	<p>Y N U e o n s / k</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is any target nearby? If yes:</p> <p><input checked="" type="checkbox"/> Drinking water intake</p> <p><input type="checkbox"/> Fishery</p> <p><input type="checkbox"/> Sensitive environment</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Has any intake, fishery, or recreational area been closed?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Does analytical or circumstantial evidence suggest surface water contamination at or downstream of a target?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Does any target warrant sampling? If yes:</p> <p><input type="checkbox"/> Drinking water intake</p> <p><input type="checkbox"/> Fishery</p> <p><input type="checkbox"/> Sensitive environment</p> <p><input type="checkbox"/> <input type="checkbox"/> Other criteria? _____</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> PRIMARY INTAKE(S) IDENTIFIED?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> PRIMARY FISHERY(IES) IDENTIFIED?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> PRIMARY SENSITIVE ENVIRONMENT(S) IDENTIFIED?</p>
<p>Summarize the rationale for Suspected Release (attach an additional page if necessary):</p>	<p>Summarize the rationale for Primary Targets (attach an additional page if necessary):</p>

SURFACE WATER PATHWAY LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Surface Water Pathway Criteria List, page 11)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Distance to surface water:	13,200 ft
Flood frequency:	100 yrs
What is the downstream distance to the nearest drinking water intake?	2.5 miles
Nearest fishery?	8 miles
Nearest sensitive environment?	16 miles

LIKELIHOOD OF RELEASE

- SUSPECTED RELEASE:** If you suspect a release to surface water (see page 11), assign a score of 550. Use only column A for this pathway.
- NO SUSPECTED RELEASE:** If you do not suspect a release to surface water, use the table below to assign a score based on distance to surface water and flood frequency. Use only column B for this pathway.

Distance to surface water ≤ 2,500 feet	500
Distance to surface water > 2,500 feet, and	
Site in annual or 10-year floodplain	500
Site in 100-year floodplain	400
Site in 500-year floodplain	300
Site outside 500-year floodplain	100

A Suspected Release	B No Suspected Release	Reference
550	(100, 400, 300, 100)	
	400	
550	(100, 400, 300, 100)	
	400	

LR =

DRINKING WATER THREAT TARGETS

- Record the water body type, flow (if applicable), and number of people served by each drinking water intake within the target distance limit. If there is no drinking water intake within the target distance limit, factors 4, 5, and 6 each receive zero scores.

Intake Name	Water Body Type	Flow	People Served
		cfs	
		cfs	
		cfs	

- PRIMARY TARGET POPULATION:** If you suspect any drinking water intake listed above has been exposed to a hazardous substance from the site (see Surface Water Pathway Criteria List, page 11), list the intake name(s) and calculate the factor score based on the total population served.

_____ people × 10 =

- SECONDARY TARGET POPULATION:** Determine the number of people served by drinking water intakes that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 3.

Are any intakes part of a blended system? Yes ☐ No ☐
If yes, attach a page to show apportionment calculations.

- NEAREST INTAKE:** If you have identified a primary target population for the drinking water threat (factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking water intake exists within the target distance limit, assign a score of zero.

- RESOURCES**

T =

	18	
NEAREST	NEAREST	
	1	
NEAREST	NEAREST	
	5	
	24	

PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow (see PA Table 4)	Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category												Population Value
			1 to 30	31 to 100	101 to 200	301 to 1,000	1,001 to 2,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	Greater than 1,000,000		
< 10 cfs	_____	20	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,346	_____	
10 to 100 cfs	_____	2	1	1	2	5	16	52	163	521	1,633	5,214	16,325	_____	
> 100 to 1,000 cfs	<u>30,000</u>	1	0	0	1	1	2	5	16	52	163	521	1,633	<u>16</u>	
> 1,000 to 10,000 cfs	<u>30,000</u>	0	0	0	0	0	1	1	2	5	16	52	163	<u>2</u>	
> 10,000 cfs or Great Lakes	_____	0	0	0	0	0	0	0	1	1	2	5	16	_____	
3-mile Mixing Zone	_____	10	1	3	8	26	82	261	816	2,607	8,162	26,068	81,663	_____	
Nearest Intake =		<u>1</u>												Score =	<u>18</u>

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS

Type of Surface Water Body		Dilution Weight
Water Body Type	OR Flow	
minimal stream	< 10 cfs	1
small to moderate stream	10 to 100 cfs	0.1
moderate to large stream	> 100 to 1,000 cfs	N/A
large stream to river	> 1,000 to 10,000 cfs	N/A
large river	> 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers	10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes	N/A	N/A

Date:

**SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET**

LIKELIHOOD OF RELEASE

Enter Surface Water Likelihood of Release score from page 12.

LR =

A	B
Suspected Release	No Suspected Release
MAX	MAX (0.00100 = 100)
	400

Reference

HUMAN FOOD CHAIN THREAT TARGETS

8. Record the water body type and flow (if applicable) for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Fishery Name	Water Body Type	Flow
		cfs
		cfs
		cfs
		cfs
		cfs

9. **PRIMARY FISHERIES:** If you suspect any fishery listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the primary fisheries:

10. SECONDARY FISHERIES

- A. If you suspect a release to surface water and have identified a secondary fishery but no primary fishery, assign a score of 210.
- B. If you do not suspect a release, assign a Secondary Fisheries score from the table below using the lowest flow at any fishery within the target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

	MAX = 12
	12
	MAX = 12
	12

T =

SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORESHEET

LIKELIHOOD OF RELEASE

Enter Surface Water Likelihood of Release score from page 12.

LR =

A	B
Suspected Release (100)	No Suspected Release (0)
	400

Reference:

ENVIRONMENTAL THREAT TARGETS

11. Record the water body type and flow (if applicable) for each surface water sensitive environment within the target distance limit (see PA Tables 4 and 5). If there is no sensitive environment within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Environment Name	Water Body Type	Flow
		cfs
		cfs
		cfs
		cfs
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate factor 13. List the primary sensitive environments:

13. SECONDARY SENSITIVE ENVIRONMENTS: If sensitive environments are present, but none is a primary sensitive environment, evaluate Secondary Sensitive Environments based on flow.

- A. For secondary sensitive environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Duration Weight (PA Table 4)	Environment Type and Value (PA Tables 6 and 8)	Total
cfs	X	=	
cfs	X	=	
cfs	X	=	
cfs	X	=	
cfs	X	=	

Sum =

- B. If all secondary sensitive environments are located on surface water bodies with flows > 100 cfs, assign a score of 10.

T =

	0
	10
	10

PA TABLE 5: SURFACE WATER AND AIR PATHWAY SENSITIVE ENVIRONMENTS VALUES

Sensitive Environment	Assigned Value
Critical habitat for Federally designated endangered or threatened species	100
Marine Sanctuary	
National Park	
Designated Federal Wilderness Area	
Ecologically important areas identified under the Coastal Zone Wilderness Act	
Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act	
Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes)	
National Monument (air pathway only)	75
National Seashore Recreation Area	
National Lakeshore Recreation Area	
Habitat known to be used by Federally designated or proposed endangered or threatened species	
National Preserve	
National or State Wildlife Refuge	
Unit of Coastal Barrier Resources System	
Federal land designated for the protection of natural ecosystems	
Administratively Proposed Federal Wilderness Area	
Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system	50
Terrestrial areas utilized for breeding by large or dense aggregations of vertebrate animals (air pathway) or semi-aquatic foragers (surface water pathway)	
National river reach designated as Recreational	
Habitat known to be used by State designated endangered or threatened species	
Habitat known to be used by a species under review as to its Federal endangered or threatened status	
Coastal Barrier (partially developed)	
Federally designated Scenic or Wild River	
State land designated for wildlife or game management	
State designated Scenic or Wild River	
State designated Natural Area	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	5
State designated areas for protection/maintenance of aquatic life under the Clean Water Act	
Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 8 (Air Pathway)

PA TABLE 6: SURFACE WATER PATHWAY WETLANDS FRONTAGE VALUES

Total Length of Wetlands	Assigned Value
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 6 miles	150
Greater than 6 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

**SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

WASTE CHARACTERISTICS

14. A. If you have identified any primary target for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4; or a score of 32, whichever is GREATER; do not evaluate part B of this factor.

B. If you have NOT identified any primary target for surface water, assign the waste characteristics score calculated on page 4.

A	B
Suspected Release	No Suspected Release
(100, 32, or 32)	
(100, 32, or 32)	(100, 32, or 32)
	18
WC =	18

SURFACE WATER PATHWAY THREAT SCORES

Threat	Likelihood of Release (LR) Score (from page 12)	Targets (T) Score (pages 12, 14, 15)	Pathway Waste Characteristics (WC) Score (determined above)	Threat Score $LR \times T \times WC$ / 62,500
Drinking Water	400	24	18	2.00 <small>(Score is a maximum of 100)</small>
Human Food Chain	400	12	18	1.00 <small>(Score is a maximum of 100)</small>
Environmental	400	10	18	1.00 <small>(Score is a maximum of 100)</small>

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat)

4.00 <small>(Score is a maximum of 100)</small>
--

SOIL EXPOSURE PATHWAY CRITERIA LIST

SUSPECTED CONTAMINATION	RESIDENT POPULATION
<p>Surficial contamination can generally be assumed.</p>	<p>Y N U e e n s s k</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is any residence, school, or daycare facility on or within 200 feet of an area of suspected contamination?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is any residence, school, or daycare facility located on adjacent land previously owned or leased by the site owner/operator?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is there a migration route that might spread hazardous substances near residences, schools, or daycare facilities?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Have onsite or adjacent residents or students reported adverse health effects, exclusive of apparent drinking water or air contamination problems?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Does any neighboring property warrant sampling?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other criteria? _____</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> RESIDENT POPULATION IDENTIFIED?</p>

Summarize the rationale for Resident Population (attach an additional page if necessary):

SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics	
Do any people live on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the facility active? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, estimate the number of workers: 800	

LIKELIHOOD OF EXPOSURE

1. SUSPECTED CONTAMINATION: Surficial contamination can generally be assumed, and a score of 550 assigned. Assign zero only if the absence of surficial contamination can be confidently demonstrated.

LE =

Suspected Contamination
550

Reference

RESIDENT POPULATION THREAT TARGETS

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or daycare on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18).
- _____ people x 10 =
3. RESIDENT INDIVIDUAL: If you have identified a resident population (factor 2), assign a score of 50; otherwise, assign a score of 0.
4. WORKERS: Use the following table to assign a score based on the total number of workers at the facility and nearby facilities with suspected contamination:

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
> 1,000	15

5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Use PA Table 7 to assign a value for each terrestrial sensitive environment on an area of suspected contamination:

Terrestrial Sensitive Environment Type	Value

Sum =

6. RESOURCES

T =

WASTE CHARACTERISTICS

7. Assign the waste characteristics score calculated on page 4.

WC =

(PA Table 8, p. 18)

18

RESIDENT POPULATION THREAT SCORE:

$$\frac{LE \times T \times WC}{82,500}$$

Resident Population Threat Score
2

NEARBY POPULATION THREAT SCORE:

Nearby Population Threat Score
1

SOIL EXPOSURE PATHWAY SCORE:

Resident Population Threat + Nearby Population Threat

Soil Exposure Pathway Score
3

**PA TABLE 7: SOIL EXPOSURE PATHWAY
TERRESTRIAL SENSITIVE ENVIRONMENT VALUES**

<i>Terrestrial Sensitive Environment</i>	<i>Assigned Value</i>
Terrestrial critical habitat for Federally designated endangered or threatened species	100
National Park	
Designated Federal Wilderness Area	
National Monument	
Terrestrial habitat known to be used by Federally designated or proposed threatened or endangered species	75
National Preserve (terrestrial)	
National or State terrestrial Wildlife Refuge	
Federal land designated for protection of natural ecosystems	
Administratively proposed Federal Wilderness Area	
Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	
Terrestrial habitat used by State designated endangered or threatened species	50
Terrestrial habitat used by species under review for Federal designated endangered or threatened status	
State lands designated for wildlife or game management	25
State designated Natural Areas	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	

AIR PATHWAY CRITERIA LIST	
SUSPECTED RELEASE	PRIMARY TARGETS
<p>Y N U • • • s</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Are odors currently reported?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Has release of a hazardous substance to the air been directly observed?</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Are there reports of adverse health effects (e.g., headaches, nausea, dizziness) potentially resulting from migration of hazardous substances through the air?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Does analytical or circumstantial evidence suggest a release to the air?</p> <p><input type="checkbox"/> <input type="checkbox"/> Other criteria? _____</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> SUSPECTED RELEASE?</p>	<p>If you suspect a release to air, evaluate all populations and sensitive environments within 1/4 mile (including those onsite) as primary targets.</p>
<p>Summarize the rationale for Suspected Release (attach an additional page if necessary):</p>	

AIR PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Air Pathway Criteria List, page 21)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Distance to the nearest individual:	300 ft

LIKELIHOOD OF RELEASE

- SUSPECTED RELEASE:** If you suspect a release to air (see page 21), assign a score of 500. Use only column A for this pathway.
- NO SUSPECTED RELEASE:** If you do not suspect a release to air, assign a score of 500. Use only column B for this pathway.

	A Suspected Release	B No Suspected Release	Reference
1.	500		
2.		500	
LR =		500	

TARGETS

- PRIMARY TARGET POPULATION:** Determine the number of people subject to exposure from a suspected release of hazardous substances to the air.
_____ people $\times 10 =$
- SECONDARY TARGET POPULATION:** Determine the number of people not suspected to be exposed to a release to air, and assign the total population score using PA Table 8.
- NEAREST INDIVIDUAL:** If you have identified any Primary Target Population for the air pathway, assign a score of 50; otherwise, assign the Nearest Individual score from PA Table 8.
- PRIMARY SENSITIVE ENVIRONMENTS:** Sum the sensitive environment values (PA Table 6) and wetland acreage values (PA Table 9) for environments subject to exposure from a suspected release to the air.

Sensitive Environment Type	Value

		88	
		20	
Sum =			
		0	
		0	
T =		108	

WASTE CHARACTERISTICS

- A.** If you have identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- B.** If you have NOT identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4.

		18
WC =		18

AIR PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

Result is a maximum of 100
12

PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Population	Nearest Individual (choose highest)	Population Within Distance Category													Population Value
			1 to 10	11 to 20	31 to 100	101 to 200	201 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 20,000	20,001 to 100,000	100,001 to 200,000	200,001 to 1,000,000	Greater than 1,000,000		
Onsite	800	20	1	2	5	10	52	103	521	1,033	5,214	10,325	52,136	102,840	52	
> 0 to 1/4 mile	876	20	1	1	1	4	13	41	130	408	1,303	4,081	12,034	40,811	13	
> 1/4 to 1/2 mile	219	2	0	0	1	1	3	9	28	88	282	882	2,815	8,815	1	
> 1/2 to 1 mile	3918	1	0	0	0	1	1	3	8	26	83	261	834	2,612	8	
> 1 to 2 miles	10,491	0	0	0	0	0	1	1	3	8	27	83	268	833	8	
> 2 to 3 miles	11,690	0	0	0	0	0	1	1	1	4	12	38	120	376	4	
> 3 to 4 miles	11,993	0	0	0	0	0	0	1	1	2	7	23	73	228	2	
Nearest Individual =			Score =												88	

PA TABLE 9: AIR PATHWAY VALUES FOR WETLAND AREA

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS FOR AIR PATHWAY SECONDARY SENSITIVE ENVIRONMENTS

		Sensitive Environment Type and Value (from PA Table 6 or 9)		Product
Distance	Weight			
Onsite	0.10	X		
		X		
0-1/4 mi	0.025	X		
		X		
1/4-1/2mi	0.0064	X		
		X		
		X		
		X		
Total Environments Score =				

SITE SCORE CALCULATION

	S	S ²
GROUND WATER PATHWAY SCORE (S _{gw}):	1	1
SURFACE WATER PATHWAY SCORE (S _{sw}):	4	16
SOIL EXPOSURE PATHWAY SCORE (S _s):	3	9
AIR PATHWAY SCORE (S _a):	12	144
SITE SCORE:	$\sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2}{4}}$	
	7	

SUMMARY

	YES	NO
1. Is there a high possibility of a threat to any nearby drinking water well(s) by migration of a hazardous substance in ground water? A. If yes, identify the well(s). _____ B. If yes, how many people are served by the threatened well(s)? _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is there a high possibility of a threat to any of the following by hazardous substance migration in surface water? A. Drinking water intake B. Fishery C. Sensitive environment (wetland, critical habitat, others) D. If yes, identify the target(s). _____ _____ _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3. Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility? If yes, identify the property(ies) and estimate the associated population(s). _____ _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are there public health concerns at this site that are not addressed by PA scoring considerations? If yes, explain: _____ _____ _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potential Hazardous Waste Site Preliminary Assessment Form		Identification	
		State: GA	CERCLIS Number: GAD984309094
		CERCLIS Discovery Date: 3-17-92	
1. General Site Information			
Name: 24-BATTEY GENERAL HOSPITAL		Street Address: 1305 REDMOND CIRCLE	
City: ROME	State: GA	Zip Code: 30165	County: FLOYD
Latitude: NORTH Longitude: WEST 34° 46' 44.0" 85° 12' 11.0"		Approximate Area of Site: 160 Acres ____ Square Ft	Status of Site: <input checked="" type="checkbox"/> Active <input type="checkbox"/> Not Specified <input type="checkbox"/> Inactive <input type="checkbox"/> NA (GW plume, etc.)
2. Owner/Operator Information			
Owner: STATE OF GEORGIA		Operator: STATE OF GA.	
Street Address: N/A		Street Address: N/A	
City: _____		City: _____	
State: _____	Zip Code: _____	Telephone: (706) 295-6011	
Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal <input checked="" type="checkbox"/> State <input type="checkbox"/> Not Specified <input type="checkbox"/> Indian <input type="checkbox"/> Other _____		How Initially Identified: <input type="checkbox"/> Citizen Complaint <input checked="" type="checkbox"/> Federal Program <input type="checkbox"/> PA Petition <input type="checkbox"/> Incidental <input type="checkbox"/> State/Local Program <input type="checkbox"/> Not Specified <input type="checkbox"/> RCRA/CERCLA Notification <input checked="" type="checkbox"/> Other DEAP-FWDS-CANDIDATE	
3. Site Evaluator Information			
Name of Evaluator: NORMAN R. WOODBURN E.P.D. - HAZ/ASTE/MAN		Date Prepared: 9-23-92	
Street Address: FLOYD TOWER EAST SUITE 1154 - 205 BENTLEY ST		City: ATLANTA State: GA	
Name of EPA or State Agency Contact: ENVIRONMENTAL PROT. DIV. HAZARDOUS WASTE MANAGEMENT BRANCH		Street Address: FLOYD TOWER EAST SUITE 1154	
City: ATLANTA - GA 30346		State: GA Telephone: 404 656-7802	
4. Site Disposition (for EPA use only)			
Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____		CERCLIS Recommendation: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other _____ Date: _____	
Signature: _____		Name (typed): _____	
Position: _____			



Potential Hazardous Waste Site
Preliminary Assessment Form - Page 2 of 4

CERCLIS Number:

GAD964309096

5. General Site Characteristics

Predominant Land Uses Within 1 Mile of Site (check all that apply):

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Industrial | <input type="checkbox"/> Agriculture | <input type="checkbox"/> DOI |
| <input checked="" type="checkbox"/> Commercial | <input checked="" type="checkbox"/> Mining | <input type="checkbox"/> Other Federal Facility |
| <input checked="" type="checkbox"/> Residential | <input type="checkbox"/> DOD | |
| <input type="checkbox"/> Forest/Fields | <input type="checkbox"/> DOE | <input type="checkbox"/> Other _____ |

Site Setting:

- ☒ Urban
☐ Suburban
☐ Rural

Years of Operation:

Beginning Year 1943

Ending Year PRESENT

☐ Unknown

Type of Site Operations (check all that apply):

☐ Manufacturing (must check subcategory)

- ☐ Lumber and Wood Products
- ☐ Inorganic Chemicals
- ☐ Plastic and/or Rubber Products
- ☐ Paints, Varnishes
- ☐ Industrial Organic Chemicals
- ☐ Agricultural Chemicals
(e.g., pesticides, fertilizers)
- ☐ Miscellaneous Chemical Products
(e.g., adhesives, explosives, ink)
- ☐ Primary Metals
- ☐ Metal Coating, Plating, Engraving
- ☐ Metal Forging, Stamping
- ☐ Fabricated Structural Metal Products
- ☐ Electronic Equipment
- ☐ Other Manufacturing

☐ Mining

- ☐ Metals
- ☐ Coal
- ☐ Oil and Gas
- ☐ Non-metallic Minerals

☐ Retail

- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☐ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA

- ☐ Treatment, Storage, or Disposal
- ☐ Large Quantity Generator
- ☐ Small Quantity Generator
- ☐ Subtitle D
 - ☐ Municipal
 - ☐ Industrial
- ☐ "Converter"
- ☐ "Protective Filter"
- ☐ "Non- or Late Filer"

☐ Not Specified

☒ Other STATE OWNED

+ OPERATED HOSPITAL

Waste Generated:

- ☒ Onsite ???
☐ Offsite
☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☐ Present Owner
☐ Former Owner
☐ Present & Former Owner
☐ Unauthorized
☒ Unknown

Waste Accessible to the Public:

- ☐ Yes
☒ No

Distance to Nearest Dwelling,
School, or Workplace:

300 Feet

6. Waste Characteristics Information

Source Type:

(check all that apply)

- ☒ Landfill
- ☐ Surface Impoundment
- ☐ Drums
- ☐ Tanks and Non-Drum Containers
- ☐ Chemical Waste Pile
- ☐ Scrap Metal or Junk Pile
- ☐ Tailings Pile
- ☐ Trash Pile (open dump)
- ☐ Land Treatment
- ☐ Contaminated Ground Water Plume
(unidentified source)
- ☐ Contaminated Surface Water/Sediment
(unidentified source)
- ☐ Contaminated Soil
- ☐ Other _____
- ☐ No Sources

Source Waste Quantity:
(include units)

2,240 CU.FT.

Tier*:

V

General Types of Waste (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Metals | <input type="checkbox"/> Pesticides/Herbicides |
| <input type="checkbox"/> Organics | <input type="checkbox"/> Acids/Bases |
| <input type="checkbox"/> Inorganics | <input type="checkbox"/> Oily Waste |
| <input type="checkbox"/> Solvents | <input type="checkbox"/> Municipal Waste |
| <input checked="" type="checkbox"/> Paints/Pigments | <input type="checkbox"/> Mining Waste |
| <input type="checkbox"/> Laboratory/Hospital Waste | <input type="checkbox"/> Explosives |
| <input type="checkbox"/> Radioactive Waste | <input checked="" type="checkbox"/> Other <u>WASTES</u> |
| <input type="checkbox"/> Construction/Demolition
Waste | <u>MAY NOT BE ON</u> |
| | <u>SITE</u> |

Physical State of Waste as Deposited (check all that
apply):

- ☐ Solid ☐ Sludge ☐ Powder
☒ Liquid ☐ Gas

* C = Constituent, W = Wastestream, V = Volume, A = Area



Potential Hazardous Waste Site
Preliminary Assessment Form - Page 3 of 4

CERCLIS Number:

GAD984309

7. Ground Water Pathway

Is Ground Water Used for Drinking Water Within 4 Miles:

☐ Yes
☒ No

Type of Drinking Water Wells Within 4 Miles (check all that apply):

☐ Municipal
☐ Private
☒ None

Is There a Suspected Release to Ground Water:

☐ Yes
☒ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☒ No

If Yes, Enter Primary Target Population:

_____ People

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	<u>0</u>
> 1/4 - 1/2 Mile	<u>0</u>
> 1/2 - 1 Mile	<u>0</u>
> 1 - 2 Miles	<u>0</u>
> 2 - 3 Miles	<u>0</u>
> 3 - 4 Miles	<u>0</u>
Total Within 4 Miles	<u>0</u>

Depth to Shallowest Aquifer:

_____ Feet

Karst Terrain/Aquifer Present:

☒ Yes
☐ No

Nearest Designated Wellhead Protection Area:

☐ Underlies Site
☐ > 0 - 4 Miles
☒ None Within 4 Miles

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☐ Stream ☒ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other _____

Shortest Overland Distance From Any Source to Surface Water:

_____ Feet
0.47 Miles

Is There a Suspected Release to Surface Water:

☐ Yes
☒ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ > 10 yr - 100 yr Floodplain
☐ > 100 yr - 500 yr Floodplain
☐ > 500 yr Floodplain

Drinking Water Intakes Located Along the Surface Water Migration Path:

☒ Yes
☐ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☒ No

If Yes, Enter Population Served by Primary Target Intakes:

_____ People

List All Secondary Target Drinking Water Intakes:

Name	Water Body	Flow (cfs)	Population Served
<u>OOSTANAULA</u>	<u>RIVER</u>	<u>3,530</u>	<u>30,000</u>
_____	_____	_____	_____
_____	_____	_____	_____
Total within 15 Miles			<u>30,000</u>

Fisheries Located Along the Surface Water Migration Path:

☒ Yes
☐ No

Have Primary Target Fisheries Been Identified:

☐ Yes
☒ No

List All Secondary Target Fisheries:

Water Body/Fishery Name	Flow (cfs)
<u>ETOWAH RIVER</u>	<u>258</u>
<u>OOSTANAULA RIVER</u>	<u>3,530</u>
_____	_____
_____	_____



Potential Hazardous Waste Site
Preliminary Assessment Form - Page 4 of 4

CERCLIS Number:

GAD984309096

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes

☒ No

Have Primary Target Wetlands Been Identified:

☐ Yes

☒ No

List Secondary Target Wetlands:

Water Body	Flow (cfs)	Frontage Miles
ETOWAH	258	

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes

☒ No

Have Primary Target Sensitive Environments Been Identified:

☐ Yes

☒ No

List Secondary Target Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type

9. Soil Exposure Pathway

Are People Occupying Residences or
Attending School or Daycare on or Within 200
Feet of Areas of Known or Suspected
Contamination:

☐ Yes

☒ No

If Yes, Enter Total Resident Population:

_____ People

Number of Workers Onsite:

☐ None

☐ 1 - 100

☒ 101 - 1,000

☐ > 1,000

Have Terrestrial Sensitive Environments Been Identified on
or Within 200 Feet of Areas of Known or Suspected
Contamination:

☐ Yes

☒ No

If Yes, List Each Terrestrial Sensitive Environment:

10. Air Pathway

Is There a Suspected Release to Air:

☐ Yes

☒ No

Enter Total Population on or Within:

Onsite	800
0 - ¼ Mile	876
> ¼ - ½ Mile	219
> ½ - 1 Mile	3918
> 1 - 2 Miles	10,491
> 2 - 3 Miles	11,690
> 3 - 4 Miles	11,993
Total Within 4 Miles	39,987

Wetlands Located Within 4 Miles of the Site:

☐ Yes

☒ No

Other Sensitive Environments Located Within 4 Miles of the Site:

☐ Yes

☒ No

List All Sensitive Environments Within ¼ Mile of the Site:

Distance	Sensitive Environment Type/Wetlands Area (acres)
Onsite	NONE
0 - ¼ Mile	
> ¼ - ½ Mile	

APPENDIX B: REFERENCES

1. U.S. Geological Survey 7.5 minute series topographical maps of Georgia: Rome North 1967, photorevised 1985, Scale 1:24,000
Rome South 1968, photorevised 1985, Scale 1:24,000
Livingston, GA 1967, Scale 1:24,000
Rock Mountain 1967, photorevised, Scale 1:24,000
2. Most significant ground water recharge areas of Georgia - By Kenneth R. Davis, John C. Donahue, Robert H. Hutchenson, Deborah L. Waldrop 1989.
3. Storage Requirement for Georgia Streams - By U.S. Geological Survey - Water Resources Division, 1983, Page 56.
4. Population by Radius Data Supplied By Alan Sanderko - Environmental Analysis, Georgia Geological Survey, GA Technical Institute Research.
5. Fred Moser, Chemical Engineer - Savannah District, U.S. Army Corps of Engineers, Hazardous and Toxic Waste Section - Telephone conversation with Norman R. Woodburn, Environmental Specialist, GA EPD, September 28 & 29, 1992, Subject: Site Survey Conducted by Fred Moser.
6. Lowell R. Wilkins, Acting Superintendent, Northwest Georgia Regional Hospital - Conversation with Norman R. Woodburn, GA EPD on September 28 & 29, 1992 - Subject: Hazardous Waste Burial - General information about the site.
7. Kim Primmer, Regional Fishery Supervisor, DNR, Game and Fish Division, Fishery Section, Northwest GA Region, Conversation with Norman R. Woodburn, GA EPD on September 27 & 29, 1992 - Subject: Sensitive environments - Floyd County Endangered Species.
8. Billy Nicholson, Institutional Engineer, Northwest Georgia Regional Hospital - Conversation with Norman R. Woodburn on September 26 and 28, 1992 - Subject: Alleged Burial for Hazardous Waste and General Questions About the Site.
9. Dan Stanley, Engineer, Floyd County Water Department - Conversation with Norman R. Woodburn on September 26 & 29 1992 - Subject: Floyd County Water Supply and Rome Water Supply Wells.
10. Lee Ross, Assistant Director of Water and Sewage, City of Rome, GA - Conversation with Norman R. Woodburn on September 24 & 26, 1992.
11. Joseph Gennette, Senior Engineer, Environmental Operations, Norfolk Southern

Corporation - Conversation with Norman R. Woodburn on September 22, 1992 - Subject: Boxcar Dimensions.

12. U.S. Army Inventory Project Report of April 16, 1991 for site #I04GA041800.
13. NUS Corporation Preliminary Assessment, C&H Transportation, Rome, Floyd County, Georgia, October 23, 1990.
14. NUS Corporation Preliminary Assessment, Celanese Village Landfill, Rome, Floyd County, Georgia, September 7, 1990.
15. Bureau of the Census, Suite 3700, 101 Marietta Street, Atlanta, Georgia 30303-2700.
16. University of Georgia, Institute of Ecology - Conversation with Norman R. Woodburn on September 23, 1992 - Subject: Endangered Species, Floyd County,
17. Flood Insurance Rate Map - Floyd County, Georgia Community - Panel Number 130079-0165A, Effective Date May 19, 1987.



DEPARTMENT OF THE ARMY

SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS

ROOM 313, 77 FORSYTH ST., S.W.

ATLANTA, GEORGIA 30335-6801

REPLY TO
ATTENTION OF:

18 JUL 1991

CESAD-PD-R (200)

GA
ZY-Battery General Hospital
GAD984309096

MEMORANDUM FOR

COMMANDER, USACE, ATTN: CEMP-ZA, WASH DC 20314-1000
COMMANDER, MISSOURI RIVER DIVISION, P.O. BOX 103 DOWNTOWN STATION,
OMAHA, NE 68101-0103
COMMANDER, HUNTSVILLE DIVISION, P.O. BOX 1600, HUNTSVILLE, AL 35807-4301

SUBJECT: Defense Environmental Restoration Program for Formerly Used
Defense Sites (DERP-FUDS), Inventory Project Report (INPR) for Site No.
I04GA041800, Battey General Hospital, Rome, GA

1. I am forwarding the INPR for the Battey General Hospital for appropriate action. The site and the proposed containerized/hazardous and toxic waste (CON/HTW) project are eligible for DERP-FUDS.
2. I recommend that CEMP-R approve the proposed CON/HTW project and assign it through this headquarters to CESAS for remedial design and remedial action.
3. Questions concerning the INPR should be directed to Gary Mauldin, CESAD-PD-R, at COMM 404-331-6043 or FTS 841-6043. The Division focal point for actions beyond the preliminary assessment phase is Richard Connell, CESAD-PM-H, at COMM 404-331-7045 or FTS 841-7045.

Encl

John F. Sobke LTC EN
JOHN F. SOBKE
Major General, USA
Commanding

CF (w/encl):
CESAS-PD-E
CEMP-R

log to Encl



DEPARTMENT OF THE ARMY

SAVANNAH DISTRICT, CORPS OF ENGINEERS
P.O. BOX 889
SAVANNAH, GEORGIA 31402-0889

REPLY TO
ATTENTION OF:

CESAS-PD-E

16 April 1991

MEMORANDUM FOR: Commander, South Atlantic Division: CESAD-PD-R
(Mauldin)

SUBJECT: DERP-FUDS Inventory Project Report (INPR) for Site
No.I04GA041800, Battey General Hospital, Rome, Georgia.

1. This INPR reports on the DERP-FUDS Preliminary Assessment of the Battey General Hospital Site. A site visit was conducted on 13 September 1990. The Site Survey Summary Sheet and Site Map are enclosed.
2. We determined that the site was formerly used as a 1500-bed military hospital by the Army. Our Findings and Determination of Eligibility is enclosed.
3. We determined there is hazardous waste at the site eligible for cleanup under DERP-FUDS. The category of hazardous waste at the site is CON/HTW. A second project in the BD/DR category was assessed, but is not recommended under current policy limitations.
4. I recommend that you:
 - a. Approve and sign the Findings and Determination of Eligibility;
 - b. Forward a copy of this INPR to MRD for their records;
 - c. Forward a copy of this INPR to HND for the PA file; and
 - d. Forward a copy of this INPR to CEMP, requesting approval and funds during the second quarter FY 92 for the proposed project, so we can award a contract in FY 92. A cost estimate, which includes sampling, is attached to the enclosed Project Summary Sheet.

3 Encls

ELIAS S. SMITH
Major, Corps of Engineers
Commanding

SITE SURVEY SUMMARY SHEET
DERP-FUDS SITE NO. I04GA041800
BATTEY GENERAL HOSPITAL
ROME, GEORGIA

SITE NAME: Battey General Hospital.

LOCATION: Battey General Hospital was located in the city of Rome, Floyd County, Georgia. See location map.

SITE HISTORY: Acquisition was authorized due to military necessity under General Order No. 23, dated 15 May 1943. The site comprised approximately 160 acres of land consisting of five tracts acquired in fee by Declaration of Taking for a consideration of \$13,499. All tracts acquired were subject to existing easements for roads, highways, public utilities, and pipelines.

Battey General Hospital, named in honor of Major Robert Battey, Surgeon, Confederate Army, was a 1500-bed military hospital. The hospital was under the command of the Army Service Forces, Fourth Service Command. The facility included administrative and operational buildings, recreational facilities, military housing, and had the medical capacity to accommodate approximately 2000 patients. The cost of the government improvements was \$3,713,420.

In January 1946, Battey General Hospital was declared surplus by the War Department. Accountability for the site was assumed by the Federal Works Agency in March 1946. In January 1947, the entire facility with the exception of the chapel was conveyed to the state of Georgia by quitclaim deed. The quitclaim deed stipulated that the facility must be utilized for health purposes and a State tuberculosis sanitarium for a period of five years. The facility is now operating as Northwest Georgia Regional Hospital and presently has a tuberculosis center.

SITE VISIT: A site assessment was conducted on 13 September 1990 by Fred F. Moser, CESAS-EN-GG. He met with the Institutional and Maintenance Engineers for The Northwest Georgia Regional Hospital. Mr. Billy J. Nicholson, Jr., Institutional Engineer, gave Mr. Moser a detailed tour of the site.

CATEGORY OF HAZARD: The assessment focused on the following hazards: CON/HTW; BD/DR; HTW; and OEW.

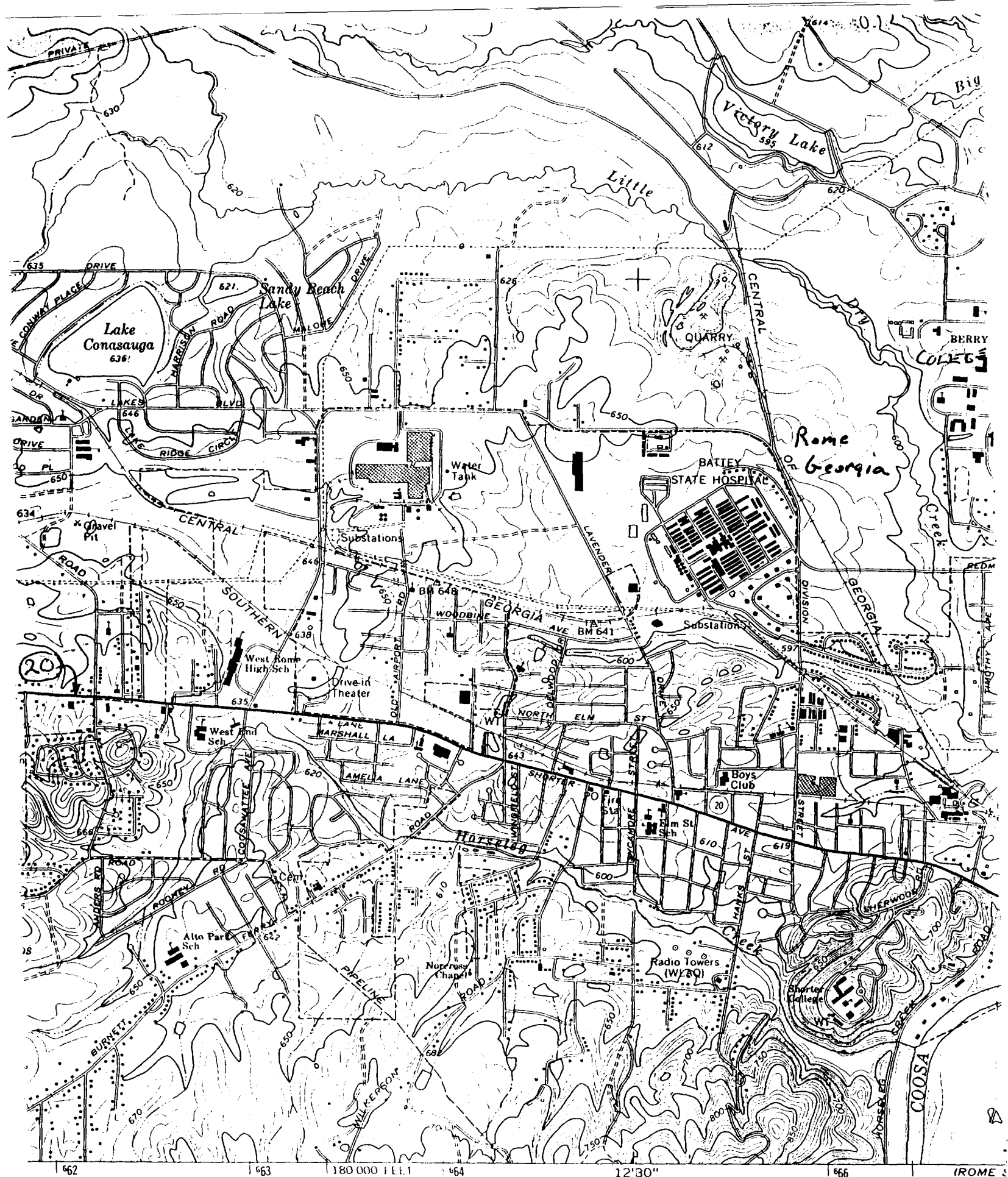
PROJECT DESCRIPTION: There are two potential projects at this site.

a. BD/DR: There are eight abandoned concrete supports for a large water tower that was never erected. The concrete blocks are about two to three feet high and several have bolts extending three to four inches from the top of the block. However, removal of these supports is not proposed based on the guidelines of CEMP-RF Policy Guidance dated 25 October 1990.

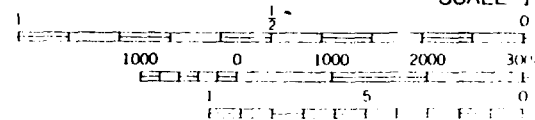
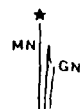
b. CON/HTW: The burial of a large number (one box car) of full paint cans occurred during the operation of the military hospital. A project is recommended.

AVAILABLE STUDIES AND REPORTS: Fred F. Moser, Site Assessment.

PA/POC: David Crosby, (912) 944-5781.



Published by the Geological Survey
 USGS, USCE, and Georgia Geodetic Survey
 Photometric methods from aerial photographs
 checked 1967
 1927 North American datum



ROME 3952 I
 SCALE 1

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES PROGRAM
FINDINGS AND DETERMINATION OF ELIGIBILITY

BATTEY GENERAL HOSPITAL, ROME, GEORGIA
SITE NO. I04GA041800

FINDINGS OF FACT

1. Battey General Hospital was located in the city of Rome, Floyd County, Georgia. Acquisition was authorized due to military necessity under General Order No. 23, dated 15 May 1943. The site was comprised of approximately 160 acres of land consisting of five tracts acquired by the War Department in fee by Declaration of Taking for a consideration of \$13,499. All tracts acquired were subject to existing easements for roads, highways, public utilities, and pipelines.
2. Battey General Hospital, named in honor of Major Robert Battey, Surgeon, Confederate Army, was a 1500-bed military hospital. The hospital was under the command of the Army Service Forces, Fourth Service Command. The facility included administrative and operational buildings, recreational facilities, military housing, and the medical capacity to accommodate approximately 2000 patients. The cost of Government improvements was \$3,713,420.
3. In January 1946, Battey General Hospital was declared surplus by the War Department. Accountability for the site was assumed by the Federal Works Agency in March 1946. In January 1947, the entire facility with the exception of the chapel was conveyed to the state of Georgia by quitclaim deed. The quitclaim deed stipulated that the facility must be utilized for health purposes and a State tuberculosis sanitarium for a period of five years. The facility is now operating as Northwest Georgia Regional Hospital and presently has a tuberculosis center.

DETERMINATION

Based on the foregoing Findings of Fact, the site has been determined to be formerly used by the Department of Defense. It is therefore eligible for the Defense Environmental Restoration Program - Formerly Used Defense Sites established under 10 USC 2701, et seq.

18 July 1991
DATE

John F. Sobke LTC EM.
JOHN F. SOBKE
Major General, USA
Commanding

PROJECT SUMMARY SHEET
DERP-FUDS CON/HTW PROJECT NO. I04GA041801
BATTEY GENERAL HOSPITAL
SITE NO. I04GA041800
ROME, GEORGIA

PROJECT DESCRIPTION: The CON/HTW project entails locating and removing a large number (one box car) of full paint cans that were buried during the operation of the military hospital.

PROJECT ELIGIBILITY: A current employee stated he had buried the paint cans during the period of Department of Defense ownership. Potential for ground contamination exists.

POLICY CONSIDERATIONS: The current owners of the facility desire the buried paint cans removed from the premises under a CON/HTW project.

PROPOSED PROJECT: CON/HTW. The project consists of the removing and disposing of paint cans followed by backfilling disturbed areas. Soil samples will be analyzed for contamination.

DD FORM 1391: Attached.

DISTRICT POC: David Crosby, (912) 944-5781.

1. COMPONENT Army		FY 19 91		MILITARY CONSTRUCTION PROJECT DATA		2. DATE 11 Apr 91	
3. INSTALLATION AND LOCATION Battey General Hospital				4. PROJECT TITLE DERP_-FUDS			
5. PROGRAM ELEMENT		6. CATEGORY CODE		7. PROJECT NUMBER I04GA04180 1		8. PROJECT COST (\$000) 54.5	
9. COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Construction Cost							35.6
Prepare an EA							6.0
S & A 8 %							4.2
Contingency 10 %							5.5
Design Cost 6 %							3.2
Total Implementation Cost							54.5
10. Description of Proposed Construction Location and removal of buried paint cans							

OVERSIZED

DOCUMENT

MAP